



# Blueprinting the Army's Modernized Environmental Enterprise Management System HQAES

## Headquarters Army Environmental System (HQAES)



**Brian R. Moyer**  
**Headquarters, Department of the Army**  
**OACSIM, Installation Services Directorate**  
**Army Environmental Division**

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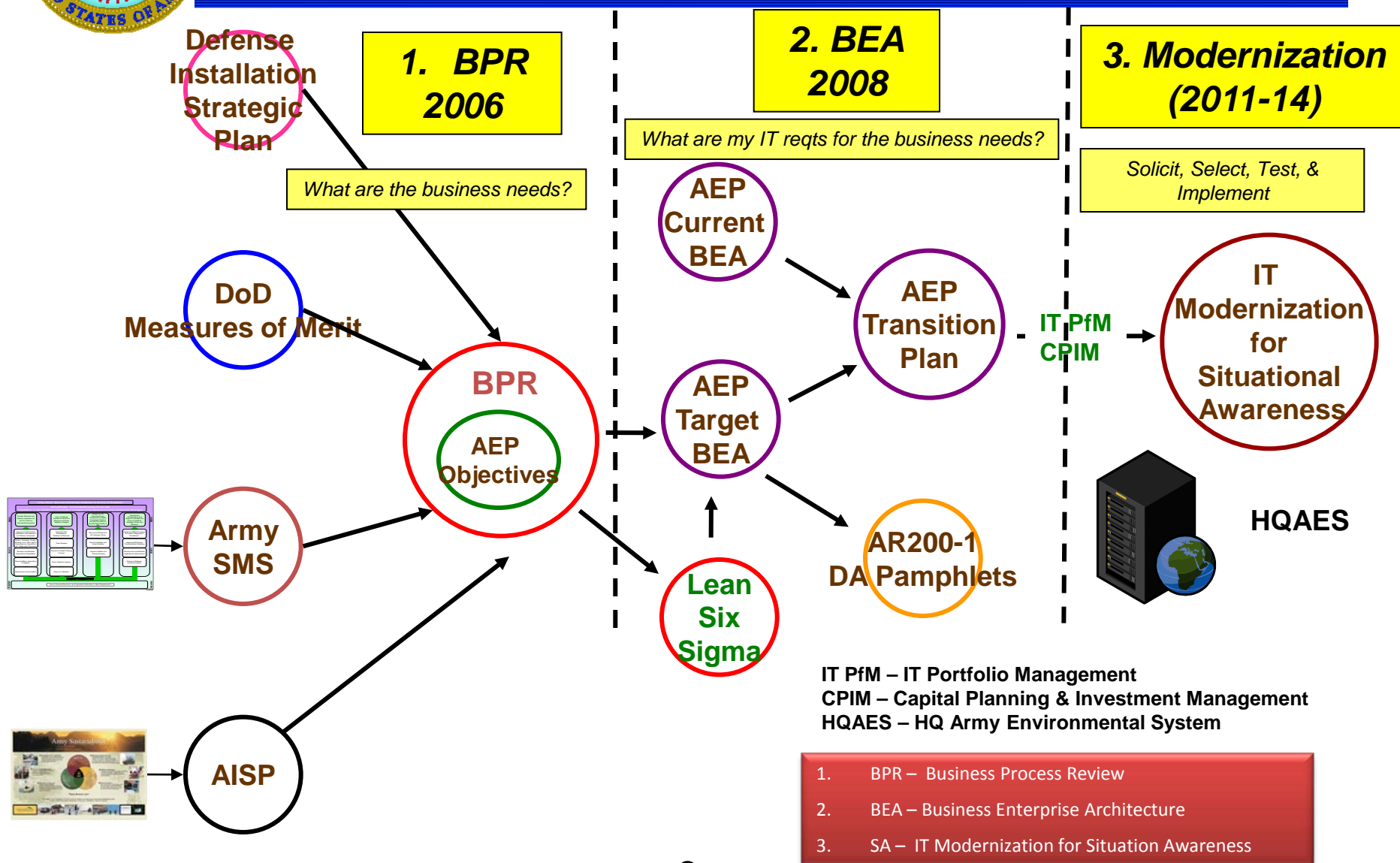
# HQ Army Environmental System (AES)

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- HQAES is an IT modernization project to replace environmental legacy data systems
- HQAES is focused on environmental programs and project management
- It serves as an end-to-end process system for Environmental Cleanup Liabilities Recognition, Validation, and Reporting requirements
- HQAES is the authoritative system of record that provides information to prepare the Defense Environmental Programs Annual Report to Congress
- Use information to prepare semi-annual reports to DoD management reviews
- Commands and Installations will use it for environmental project execution tracking and program execution management
- HQAES' planned link up with Army ERPs and DoD reporting system will enable shared use of data/information.



# Army Environmental Programs (AEP) Business Transformation Workflow





# Outputs from BPR/BEA/IT Modernization

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- ❑ AEP Business Process Review (Reengineering)
  - Defined current and future Lines of Business;
  - Developed Army Environmental Program Priorities;
  - Program Priorities set the Resource Requirements
  
- ❑ AEP Business Enterprise Architecture
  - AEP Program Process models & Data models which serve as blue prints for future refinements;
  - Build Interface with the Army's Enterprise Business System
  
- ❑ AEP IT Modernization - HQAES IT System
  - Serve as an authoritative core data base that will provide information on demand to manage environmental programs at Headquarters, Commands and Installations;
  - Serve as a tool for program performance management and planning;
  - Affords improved situational awareness at all command levels.



# AEP Business Needs & Benefits

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- Comply with Environmental Liabilities Recognition, Validation, and Reporting requirements
- Meet DoD Information Technology certification standards
- Conduct program analysis & evaluation for optimizing programming, planning, and budgeting
- Prevent time consuming verification and costly rework of data entered in multiple systems
- Eliminate redundant/obsolete data collection, and add new data requirements
- Monitor program performance to meet Army Environmental Program priorities
- Use information to prepare Defense Environmental Programs Annual Report to Congress and semi-annual DoD Environmental Program Management Reviews
- Commands and Installations also benefit for their program execution management
- Reduce data calls and improve delivery of information to customer needs



# OACSIM View of I&E Business Portfolio

## Installations & Environment Domain

Base Operations & Services

Morale, Welfare & Recreation

Installation Safety & Occupational Health

Executive Management

Housing & Furnishings

Environment

Real Property Asset Management

Installation Geospatial

Military Construction

Public Works





# Army Environmental Program Areas

## *Program Groups and Lines of Business*

### ☐ **Environmental Quality**

- Clean Air
- Clean Water / Safe Drinking Water
- Hazardous Waste / Release Management
- National Environmental Policy Act (NEPA)
- Threatened & Endangered Species
- Integrated Natural Resources Planning
- Conservation Reimbursable Programs
- Pest Management
- Archaeological Site Protection
- Historic Building Preservation
- Native American Affairs
- Integrated Cultural Resources Planning

### ☐ **Environmental Cleanup**

- Active Sites Cleanup
- BRAC Cleanup
- Formerly Used Defense Sites
- Compliance Related Cleanup (incl. overseas)

## *Program Support and Initiatives*

### ☐ **Environmental Program Support**

- Environmental Management Systems (EMS)
- Environmental Regulatory Monitoring
- Environmental Quality Acquisition Support
- Environmental Performance Assessment System (EPAS)
- Environmental Quality Reporting
- Environmental Cleanup Reporting
- Installation Status Reporting – Services
- Range Management (G3 Support)
- Environmental Liabilities Functional Lead

### ☐ **Environmental Program Initiatives**

- Emerging Contaminants
- Environmental Quality Technology
- Range Assessments
- Army Compatible Use Buffer Zone (ACUB)
- Hazardous Materials Management Program (HMMP) – G4 Liaison





# Headquarters Army IT Modernization

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The Headquarters Army Environmental System (HQAES) will be the enterprise information system enabling the Army to collect, analyze, and report environmental data in an efficient and effective manner. It allows assignment of appropriate resources and report AEP success .

HQAES has three major components:

- Environmental Cleanup Program:** This is an important component for the AEP, and consists of the overall program management and initiatives generated in order to address contamination and any Army's Army Installation Worldwide.
- Environmental Quality (EQ):** This AEP component manages all environmental quality programs with the purpose of improving environmental compliance, conservation, pollution prevention, and associated initiatives.
- Environmental Performance Assessment (EPAS):** This is an initiative that assesses, reports, and analyzes the performance of environmental compliance programs. It also assesses the effectiveness of the entire environmental management system.



# Headquarters Army IT Modernization

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## Legacy System Information:

**Army Environmental Database (AEDB):** The current system being used to collect Army ENV data and is the current DB of record. Includes cleanup, restoration, & environmental quality (-C,-R,-EQ)

**Environmental Restoration Information System (ERIS):** The current systems of record for Army restoration & field data including geological, chemical, & geographical.

**Reimbursable Program Tracking System (RPTS):** The current system of record used for tracking reimbursable transactions.

**Environmental Performance Assessment System (EPAS):** The current system of record that collects records of environmental performance assessments and corrective actions.

**Repository of Army Environmental Documents (READ):** The current repository and DB of record for documents related to cleanup and NEPA activities.



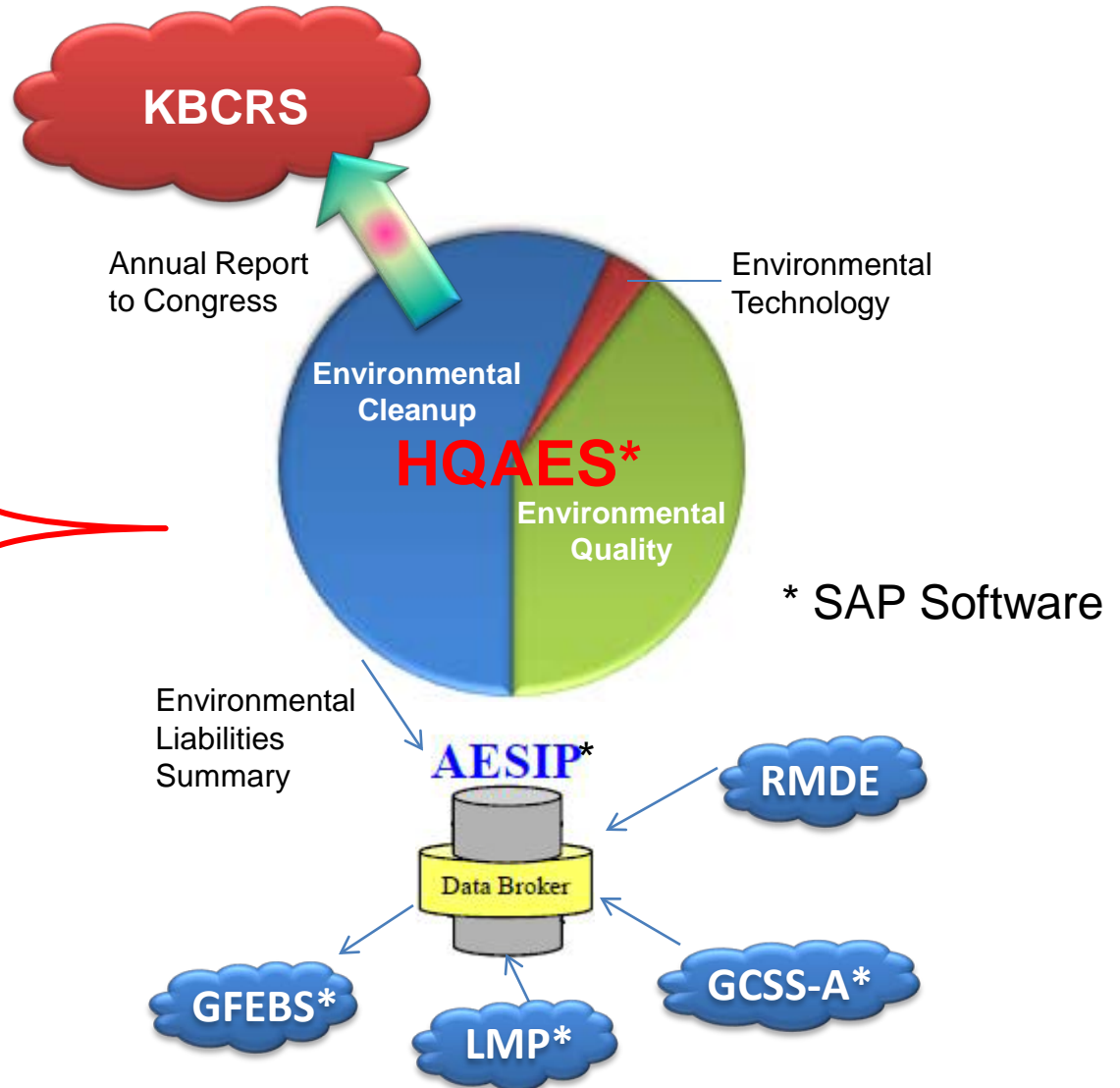
# Army Environmental Systems Legacy to Future

## \*ENVIRONMENTAL LEGACY

### DATA SYSTEMS:

- AEDB-EMS
- AEDB-EQ
- RPTS
- READ
- AEDB-TRI
- AEDB-CC
- AEDB-CDE
- AEDB-CFO
- AEDB-ER
- AEDB-IAP
- AEDB-IAP Public
- AEDB-R
- ERIS
- EL/RAMP
- EPAS
- STEP
- WASTE
- HMMS

\* Not complete





# Headquarters Army IT Modernization

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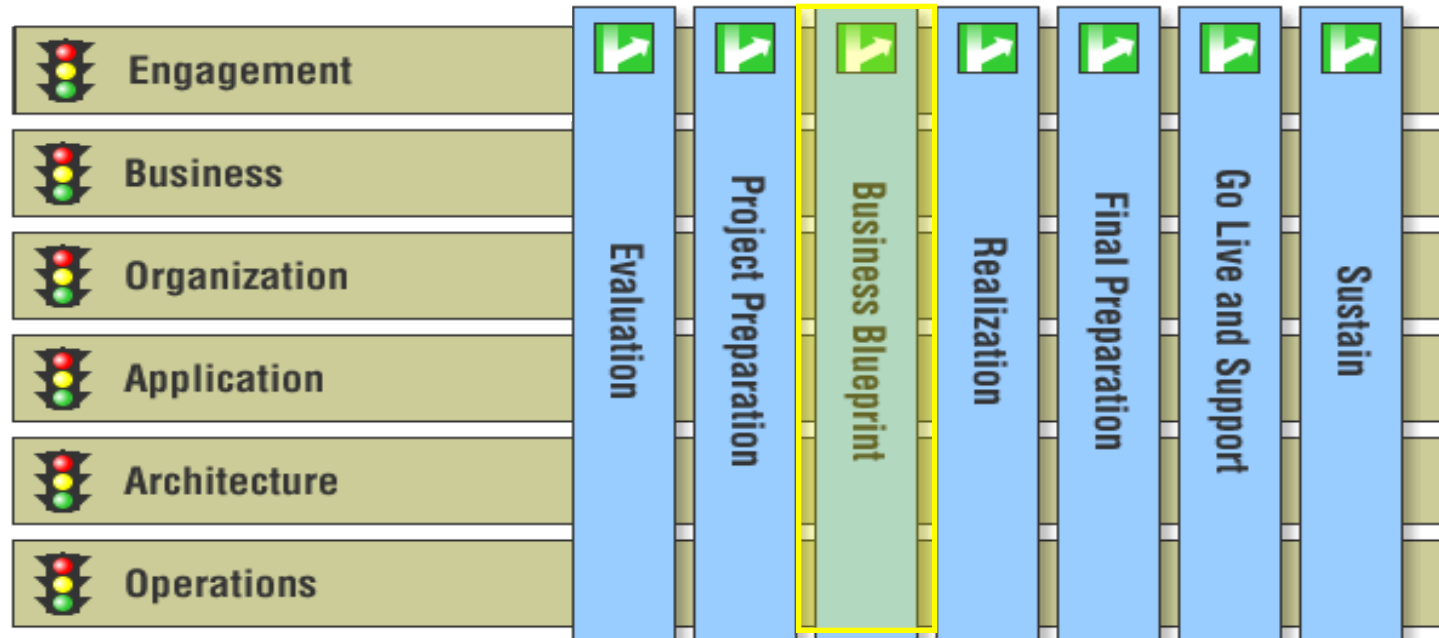
## Partial list of Essential External Interfaces:

- Army Mapper – Installation Geographic Information & Services (IGIS)
- Headquarters Installation Information System (HQIIS)
- Knowledge Based Corporate Reporting System (KBCRS)
- General Fund Enterprise Business System (GFEBS)
- Installation Status Report (ISR)
- Single Army Logistics Enterprise System (SALE)
- Army Knowledge Online (AKO)
- Status Tool for the Environmental Program (STEP)

\* Denotes critical initial systems



# Ascendant SAP implementation: Business Blueprint Phase



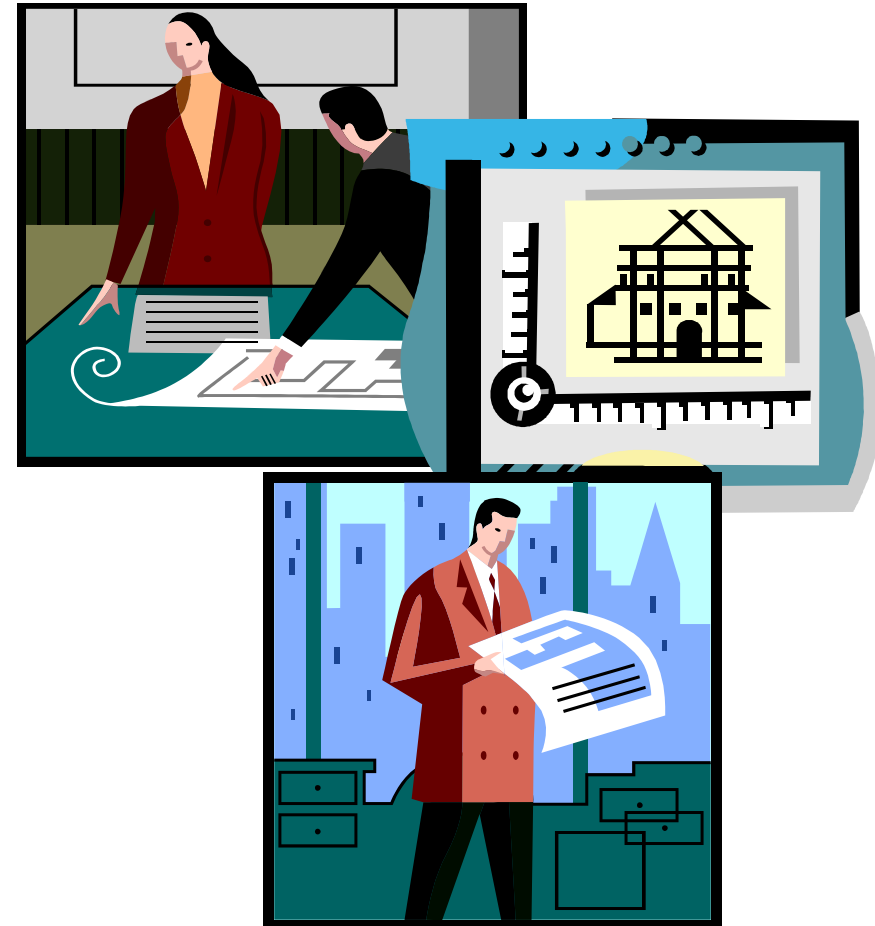
The purpose of the Business Blueprint phase is to document in detail the scope of business scenarios, business processes, process steps, and the business process requirements of an SAP implementation. This blueprint serves as the design for the build activities during the Realization phase.



# Ascendant SAP Implementation: Business Blueprint Phase

Ascendant defines the Business Blueprint as a document that detail the design of the proposed solution and implications for the business, which include:

- Proposed integrated business processes
- Supporting system functions
- Organizational structures





# Ascendant SAP Implementation: Business Blueprint Phase

## Major Areas of Activity

- Detail 'to be' business requirements
- Finalize detailed scope
- Establish client business organizational structure
- Document end-to-end business processes
- Identify business process KPIs
- Perform SAP compare fit or gap analysis
- Custom development requirements (WRICEF)
- Create the Business Blueprint
- Establish technical system environment, such as Sandbox or Development

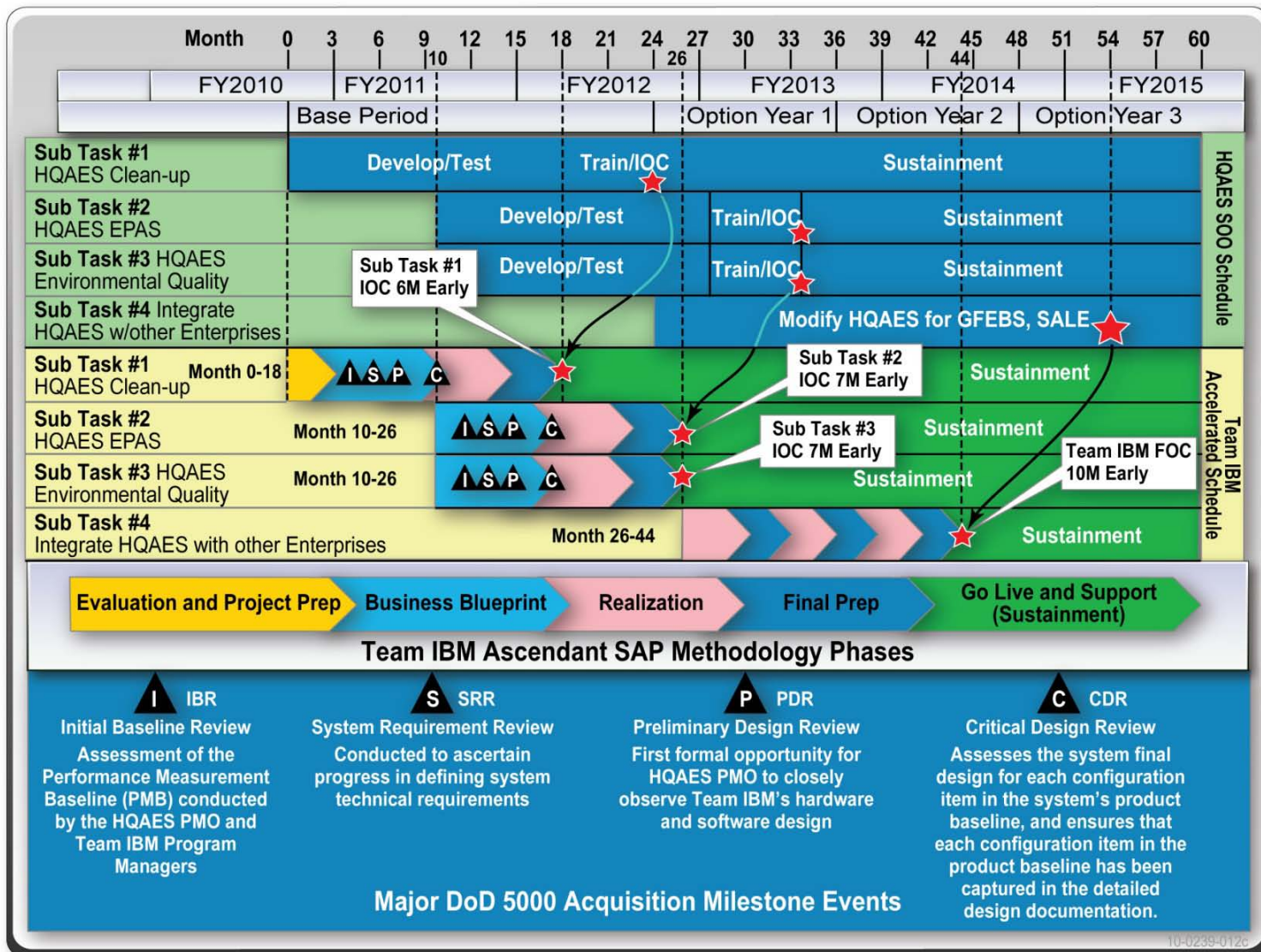
## Major Milestones

- Completion of the business process workshops
- Design or documentation of processes
- Identification of WRICEF or bolt-ons
- Installation of technical environment
- Creation of the Business Blueprint and sign-off by project sponsors





# HQAES Project Timeline





# Headquarters Army IT Modernization

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## **Lessons Learned:**

- Begin at the bottom of the food chain – the folks doing the work
- Agile and flexible development; must be an iterative process.
- Start with a robust communication plan.
- Bridging the gap of time – blueprinting new requirements against “official” old requirements.
- Include capturing the installation level project capabilities from the beginning for data quality/integrity.
- Better coordination with and inclusion of system owners whom we are interfacing.



# QUESTIONS?

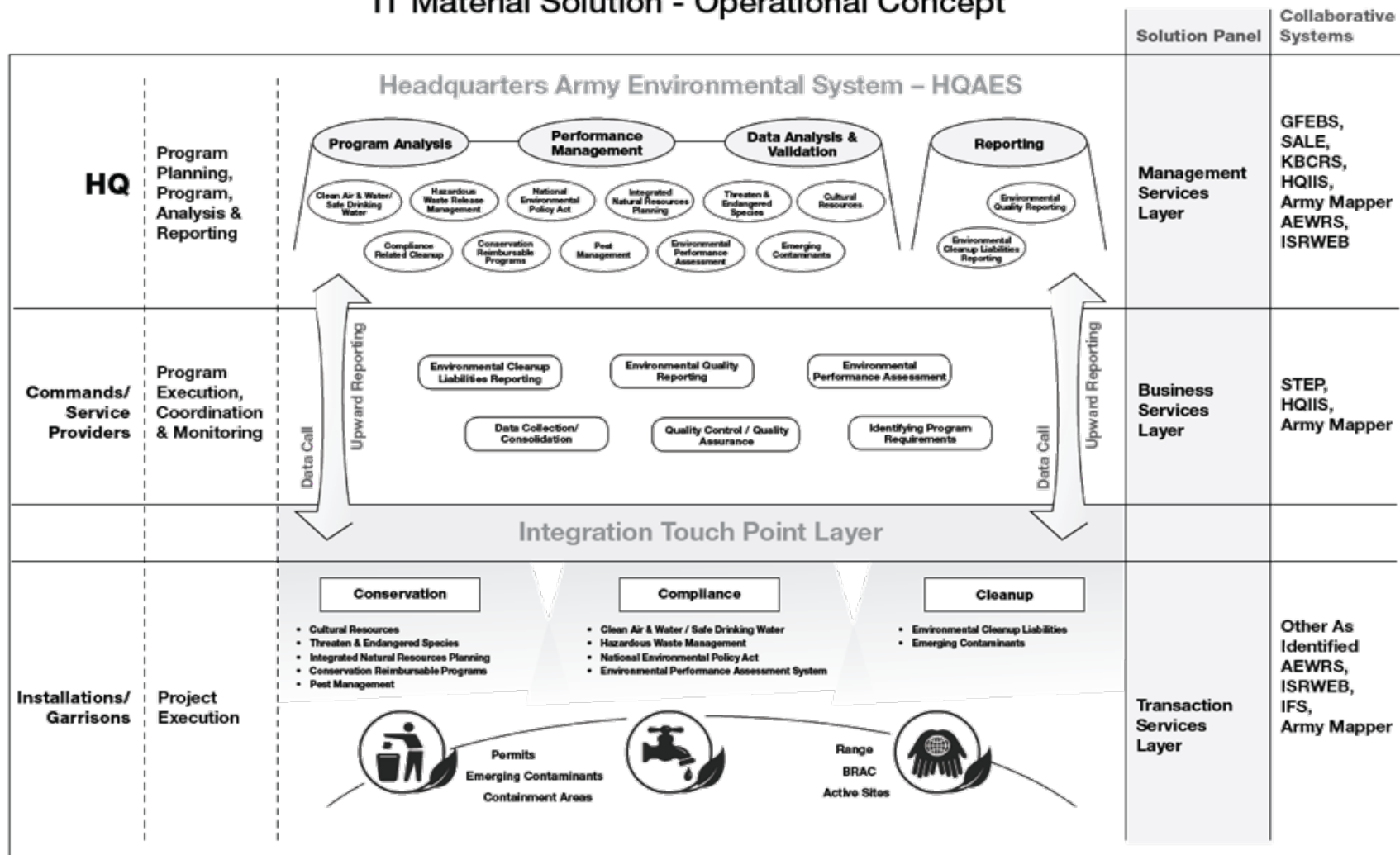


# BACK UP SLIDES



# HQAES Solution Concept

## Army Environmental Program IT Material Solution - Operational Concept





# Army Environmental Programs Management Process & Governance



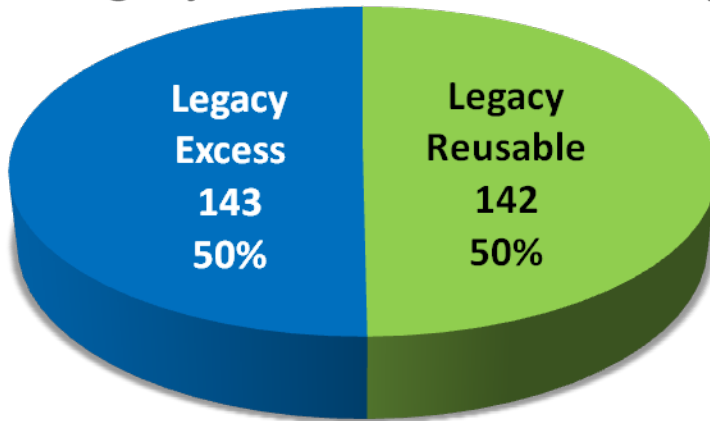




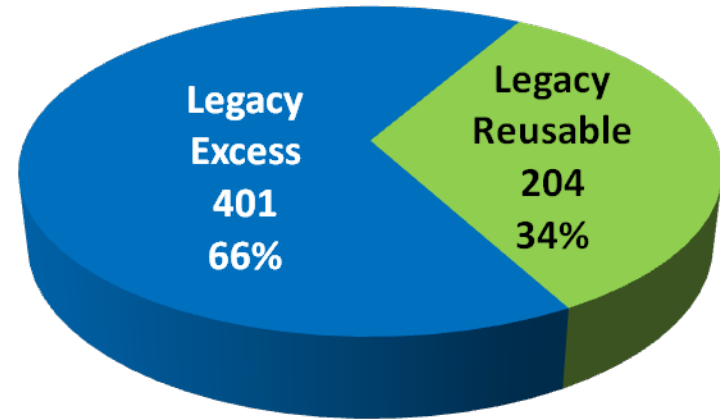
# HQ AES Entities

## Legacy to Target

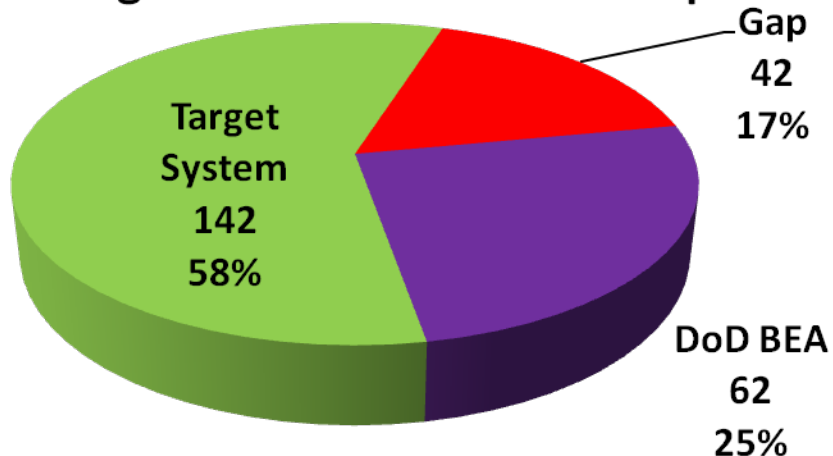
### Legacy Environmental Cleanup



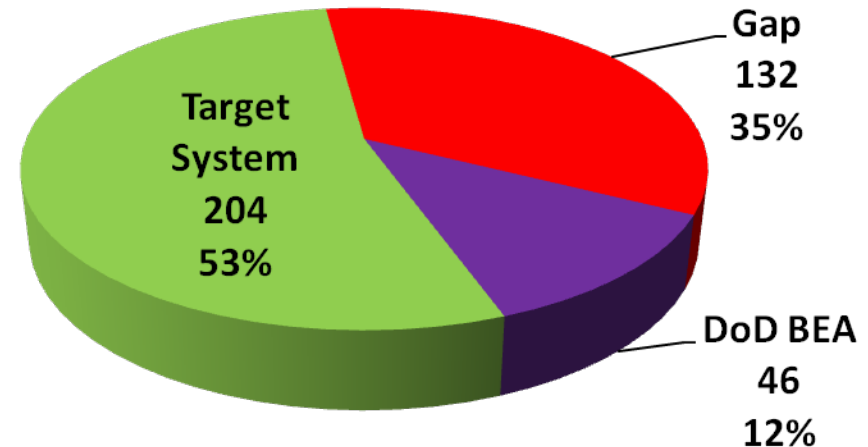
### Legacy Environmental Quality



### Target Environmental Cleanup



### Target Environmental Quality



Gap = New Logical Data Entities (required to support the "To-Be" AEP business processes)